

**ORAL ARGUMENT SCHEDULED FOR DECEMBER 15, 2017**

**No. 17-5006**

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**IN THE UNITED STATES COURT OF APPEALS  
FOR THE DISTRICT OF COLUMBIA CIRCUIT**

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**BILLINGS CLINIC, *et al.*,  
*Plaintiffs-Appellants*,**

**v.**

**ERIC D. HARGAN, Acting Secretary,  
Department of Health and Human Services,  
*Defendant-Appellee*.**

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*On Appeal from the United States District Court  
for the District of Columbia  
Civil Action No. 1:13-CV-00643-RMC*

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**FINAL REPLY BRIEF FOR THE APPELLANTS**

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## **GLOSSARY OF ABBREVIATIONS AND ACRONYMS**

APA	Administrative Procedure Act
AR	Administrative Record
Charge Ratio	Cost-to-Charge Ratio
FY	Federal Fiscal Year (October 1 – September 30)
MedPAR File	Medicare Provider Analysis and Review File
HHS	Secretary of the United States Department of Health & Human Services

## I. SUMMARY OF ARGUMENT

This case is about just how far the Court should go to defer to an agency's unexplained conclusions. Appellee Secretary of Health and Human Services ("HHS") persisted in using a failed model to forecast changes in hospital cost-to-charge ratios. Commenters suggested that HHS use instead the most current actual record trend of decline, a figure close at hand. Commenters also pointed out significant flaws in the model; questioned the underlying assumptions; and complained that the model's output bore no relationship with reality. Indeed, in the first year at issue, 2008, the model's output was directly contrary to other key assumptions in HHS's analysis. But HHS "was implacable." *See Lee Mem'l Hosp. v. Burwell*, 206 F. Supp. 3d 307, 319 (D.D.C. 2016) (RMC), JA265. These and other errors resulted in outlier payments that, year after year, were below the statutory target by many hundreds of millions of dollars.

In response to these challenges, HHS repeats the conclusory mantra it intoned throughout its 2008-2011 rulemakings, *viz.*, its model was "more accurate and stable."<sup>1</sup> That conclusion is exactly what commenters questioned, but HHS cites no consideration of the issues during the rulemakings. Nor does HHS support

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<sup>1</sup> *Cf. Parhat v. Gates*, 532 F.3d 834, 848-49 (D.C. Cir. 2008) ("Lewis Carroll notwithstanding, the fact that the [agency] has 'said it thrice' does not make an allegation true.").

its conclusion here, through either an explanation of why its modeling approach should have been expected to be either accurate or stable, or a comparison of the model with real outcomes or to the actual record trend. In essence, HHS asks the Court to defer unquestioningly.

The Hospitals recognize that an agency deserves deference for its expert judgment. The Court’s “deference, however, is not unlimited.” *Cape Cod Hosp. v. Sebelius*, 630 F.3d 203, 216 (D.C. Cir. 2011). It “must engage in a ‘searching and careful’ review of the record to ensure that the Secretary has applied [his] expertise in a reasoned manner....” *Id.* The Hospitals submit that HHS’s persistent refusal to provide even the barest rational justification for its modeling assumptions, in the face of substantial criticisms and repeated misfires, fails that standard.

## II. ARGUMENT

### A. HHS Persisted in Using a Model that Prior Experience Showed Did Not Reasonably Correspond With the Record Facts

For each of the 2008-2011 thresholds, HHS repeatedly used a flawed model that far more often than not produced outlier payments well below HHS's target, thus perpetuating a history of massive underpayments that had started in 2004. The problem stemmed from HHS's repeated failure to account rationally for two significant record facts: (1) steadily declining charge ratios and (2) outlier payments that would be recouped through reconciliation. *See* Brief for the Appellants ("Hospitals' Br.") 26-28, 38-43.

Despite acknowledged shortfalls of roughly \$400,000,000 in 2007 and \$350,000,000 in 2008, HHS argues it had no reason to reconsider its method either for 2008 or 2009.<sup>2</sup> Yet HHS's statutory mandate was to set a threshold "likely" to pay out at the 5.1% amount targeted (and offset against the ordinary case payments to reduce them by 5.1%). *See Cty. of L.A. v. Shalala*, 192 F.3d 1005, 1013 (D.C. Cir. 1999). Reusing a model that had already proved unreliable and inaccurate made it unlikely that HHS's thresholds would pay out at the 5.1% target.

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<sup>2</sup> *See also* Hospitals' Br. 22, 37 n.41; *see also* JA192 (establishing that each 0.1% equals approximately \$80 million); HHS Br. 24 (acknowledging that 2008 rulemaking estimated HHS had paid only 4.6% in 2007 and that 2009 rulemaking estimated HHS had paid only 4.7% in 2008).



Moreover, while these enormous underpayments did not move HHS to question the model, for 2010 and 2011 HHS relied on a substantially smaller estimated 2009 overpayment—the first in 6 years—as justifying its method.<sup>3</sup>

As a direct result of its refusal to correct its faulty method, HHS paid out \$1.7 billion less, over 2008-2011, than the amount of its 5.1% reductions from ordinary payments (*i.e.*, removed \$1.7 billion from the stream of Medicare payments for inpatient care). That was not an outcome Congress intended for a program established to protect hospitals from extraordinary costly cases.

1. HHS unreasonably ignored its model’s divergence from the record data

By 2008, charge ratios had consistently declined for over a decade. Consequently, to avoid overestimating total outlier payments and setting an excessive threshold, HHS needed to adjust the projection charge ratios downward to account for that decline. *See* Hospitals’ Br. 9; Defendant-Appellee’s Initial Brief (“HHS Br.”) 12; *see also Banner Health v. Price*, No. 16-5129, 2017 U.S. App. LEXIS 15635 (D.C. Cir. Aug. 18, 2017) (“Banner Health”), at \*59-60.<sup>4</sup>

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<sup>3</sup> HHS had initially estimated that total 2009 outlier payments were at 5.3%, but commenters later demonstrated they actually reached only 4.9%. Hospitals’ Br. 25-26.

<sup>4</sup> *Banner Health* held that HHS had acted arbitrarily in 2004-2006 “in failing to adequately explain why it did not adjust its projection cost-to-charge ratios downward.” *Banner Health* at \*60.

In 2007, HHS acknowledged for the first time in its final rule that it needed to account for declining charge ratios. But rather than using readily available data on the actual rate of change, as it did annually to project the rate of charge inflation, HHS substituted a modeled rate of decline. As to that first effort, *Banner Health* held that the facts before HHS were not enough to cast doubt on the model's reliability and, absent specific criticisms about flaws in the model, the Court accepted HHS's less than clear reasoning. *Banner Health* at \*78-79. The case is substantially different for the 2008-2011 rulemakings, as to which the record facts and commenters demonstrated that HHS's model was unreasonable.<sup>5</sup>

From 2008 onwards, HHS stubbornly reapplied its model without change, and it did so even in the face of, but without addressing, robust data showing that the model diverged substantially from both historical trends and actual outcomes. *See Hospitals' Br.* 28-38. Most strikingly for 2008 the model surprisingly predicted charge ratios would increase. “[J]udicial deference to the agency’s modeling cannot be utterly boundless;” a model is “arbitrary and capricious if there is simply no rational relationship between the model and the known behavior” of the quantity being modeled. *Chem. Mfrs. Ass’n v. EPA*, 28 F.3d 1259, 1265 (D.C. Cir. 1994).

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<sup>5</sup> In addition, it bears mention that either the hospitals or HHS may seek rehearing or reconsideration of the *Banner Health* decision.

HHS responds that predictions are inherently uncertain and that a model should not be rejected simply because it does not line up precisely with reality. HHS Br. 32-33. The cases HHS cites are inapposite. In *EME Homer City Generation, L.P. v. EPA*, 795 F.3d 118 (D.C. Cir. 2015), the Court declined to invalidate EPA’s model simply because there could be discrepancies which, as the agency’s rulemaking had explained, were “small and random and thus [did] not result in biases.” *Id.* at 135. In *North Carolina v. FERC*, 112 F.3d 1175 (D.C. Cir. 1997), the agency projected a city’s population growth forward 40 years into the future. A real time comparison to future results was impossible, and the Court simply acknowledged that whatever the rate of growth turned out to be, it would not line up perfectly with the prediction. *Id.* at 1190.

Neither case casts doubt on the Hospitals’ argument. Notably, HHS never offered a contemporaneous defense of the discrepancies between its model’s predictions and the record results. Moreover, when a model is analytically unsuited for its intended purpose, the agency does not deserve deference just because prediction may be inexact. Consider an example that *EME Homer City Generation* gave: A prediction that the Nationals will win the World Series is not necessarily a bad prediction just because the team does not win. 795 F.3d at 135-36. The Court’s unstated assumption was that the prediction used a reasonable method. If an agency predicted the World Series winner by picking names from a

hat, the fact that “[p]rojections ... are necessarily speculative,” *N.C.*, 112 F.3d at 1190, would not make the method defensible. Further, while some differences between prediction and outcome may be reasonable, HHS’s predictions consistently diverged widely from both the historical trend and actual outcomes. It was irrational to persist with the same predictive model without examining those discrepancies.

The 2008 rulemaking starkly illustrated the problem. HHS’s model predicted that charge ratios would increase. But for more than a decade, charge ratios had never increased, which the Hospitals showed, *see* Hospitals’ Br. 26-27, and HHS has never denied. Indeed, the consistent decline in charge ratios was the primary justification for HHS’s overall threshold-setting approach, in which it relied on charge inflation forecasts. *See Banner Health* at \*58-60. HHS has long relied on that justification, and this Court has also recognized how central it was to HHS’s analysis. *See id.* Also, the uninterrupted historical record trend demonstrated this decline in charge ratios, Hospitals’ Br. 10 n.11 & 30, and the 2008 record contained no data to the contrary.

For HHS to forecast that charge ratios would increase was like predicting the Nationals would win the World Series even though they had lost the first 60 games of the season. Surmounting a trend like that would be extraordinarily unlikely, though perhaps theoretically possible. Similarly, predicting an increase in charge

ratios after more than a decade of regular declines was not a run-of-the-mill discrepancy. It was a red flag that something was seriously wrong with the model.<sup>6</sup> HHS did not even acknowledge that the prediction was counter-factual, much less offer any suggestion why it would expect the uninterrupted long-term trend to reverse. HHS's brief, too, ignores this issue and does not "point[] to any record evidence that shows a rational relationship between [its adjustment factor] model and the" trend being modeled. *Chem. Mfrs. Ass'n*, 28 F.3d at 1265.<sup>7</sup> Here, the trend was the historical rate of decline in charge ratios (already calculated by HHS for other purposes in the same rulemaking) and the projection was an attempt to model this same rate of decline using older, mismatched data.

The 2008 record also gave HHS clear and direct feedback that its model had been wildly inaccurate as to 2007. Whereas the model in 2007 had predicted that the rate of cost inflation (the numerator for HHS's adjustment factor) would substantially increase, the 2008 rulemaking record showed that variable had

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<sup>6</sup> Commenters did not raise this issue in the 2008 rulemaking because the proposed rule had said charge ratios would decrease.

<sup>7</sup> HHS suggests that the Hospitals' argument is circular because the Hospitals compare the output of HHS's model with the predictions generated by extrapolating historical trends. HHS Br. 31. The Hospitals submit that more than a decade of declining charge ratios was trend enough to warrant assuming, during the 2008 rulemaking, that the 2008 trend would at least still be negative.

actually significantly decreased.<sup>8</sup> This substantial discrepancy was partially why HHS's 2007 model had predicted a year-on-year drop in charge ratios of only a quarter of a percent, much less than the 2.5% that actually resulted in 2007.<sup>9</sup> *See Hospitals'* Br. 29. The 2008 record also demonstrated that the ultimate output of HHS's 2007 predictive model, total outlier payments, fell more than \$400,000,000 short of HHS's expectations. Thus, the 2008 record data itself should have given HHS pause about the accuracy of its model.

Commenters also (1) questioned the model's accuracy, (2) noted how HHS's 2007 use of the model had resulted in a \$420 million shortfall (which represented "only a minor improvement over" the prior year when HHS had not adjusted charge ratios at all), and (3) suggested that HHS forecast charge ratios based on the recent trend data. **JA445-47, JA450**. These were comments that "cast doubt on

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<sup>8</sup> HHS's model in 2007 had projected 2005-2006 cost inflation would increase to a rate of 7.61%, while the 2008 record showed it had actually dropped to 5.64% over that period. Thus, HHS's projection was in the wrong direction and a 35% overshoot.

<sup>9</sup> *Banner Health* suggested that the 2007 rule's implicit forecast of a slowdown in the rate of charge ratio decline was not necessarily irrational, especially in the transition post turbo-charging. *Banner Health* at \*74-76. The 2008 record showed there had been no material slowdown; charge ratios had continued to decline consistently with the record trend. Yet HHS proceeded to predict not just a slowdown, but a reversal of the trend.

the reasonableness of [the] position taken by” HHS. *Home Box Office, Inc. v. FCC*, 567 F.2d 9, 35 n.58 (D.C. Cir. 1977).

In response, however, HHS simply declared that its method was more “accurate and stable.” JA476. This response was a self-serving conclusion, not an explanation—HHS never analyzed or even referenced the fact that it had predicted 2008 outcomes that were diametrically opposed to an uninterrupted trend stretching back more than a decade. HHS’s response “added nothing to [HHS’s] defense of its thesis except perhaps the implication that it was committed to its position regardless of any facts to the contrary.” *See Chem. Mfrs. Ass’n*, 28 F.3d at 1266.

HHS repeated this arbitrary process in the 2009 rulemaking. The 2009 record confirmed that HHS’s startling 2008 prediction was incorrect and that charge ratios, in line with the historical trend, had decreased in 2008 by 2.5%. Hospitals’ Br. 29-30. The 2009 record also showed that HHS’s model had again grossly overestimated hospital cost inflation and, based on preliminary data, underpaid in 2008 by more than \$300,000,000. JA519; *see supra* n.2. It was irrational for HHS to use the same model for 2009—*and thereafter*—without

examining what had gone wrong for 2008.<sup>10</sup> Yet once again, when confronted with comments questioning the model’s accuracy and suggesting the reasonable alternative of using the actual record trend, HHS merely parroted its same response from 2008 and 2007: that its method was more accurate and stable. **JA517**.

Again the record reveals no analysis or assessment of the wide divergence between the actual record data and the outputs of HHS’s model. *See id.*<sup>11</sup>

HHS now responds, *post hoc*, that it was not required to “abandon its threshold-setting methodology based on one or two years’ worth of data.” HHS Br. 34; *see also id.* at 29-30 (arguing HHS did not confirm the 2007 underpayment until the 2009 rulemaking). Whether HHS was required to change its model is beside the point. Comments showed that the model was significantly inaccurate, yet HHS neither analyzed nor even referenced the relevant record data and

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<sup>10</sup> HHS says the Hospitals do not challenge the 2010 and 2011 rulemakings on the ground that the model got 2007 and 2008 badly wrong. HHS Br. 34. That is incorrect. Hospitals’ Br. 29, 34-38.

<sup>11</sup> HHS complains that the Hospitals did not explain how they generated a table comparing actual changes in charge ratios to HHS’s predictions. HHS Br. 30-31. As the opening brief noted, Hospitals’ Br. 30 n.33, the Hospitals presented this table to the district court without objection from HHS; the argument is therefore waived. *Armstrong v. Exec. Office of the President, Office of Admin.*, 1 F.3d 1274, 1282 n.4 (D.C. Cir. 1993). Besides, commenters pointed out, repeatedly, the wide divergence between the model’s projections and the actual facts (**JA460-61**; **JA500-02**; **JA547**, **JA549-50**; **JA605**; **JA607-08**); and HHS itself, in its annual rulemakings, calculated nationwide average charge ratios from which the departure was readily apparent. **JA477**; **JA518**; **JA575**; **JA627-28**.



therefore did not articulate a rational basis for persisting with its model. *Cf. Dist. Hosp. Partners, L.P. v. Burwell*, 786 F.3d 46, 57 (D.C. Cir. 2015) (failure “to examine the relevant data” violates “the APA.”).<sup>12</sup>

Even in the 2010 rulemaking, when a commenter provided detailed analysis demonstrating the inaccuracy of HHS’s method relative to using the most recent historical trend, HHS still did not reexamine its assumptions or seriously consider the comment. *See* JA573-74. HHS patches over its non-response with the *post hoc* assertion that “the results were mixed.” HHS Br. 32. This assertion implies HHS had no obligation to respond to a suggested alternative unless it was unquestionably superior to the agency’s proposal.<sup>13</sup> However, an agency must respond to “relevant and significant” comments, and it must “respond sufficiently

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<sup>12</sup> HHS also now posits that actual payments could have fallen short in 2007 and 2008 for reasons “unrelated” to defects in the model, so it was entitled to ignore comments to reexamine its method. HHS Br. 30. However, HHS never identified any potential other reasons in the record, much less indicated that it had undertaken such an analysis. It is hardly responsive for HHS now, years later, to speculate about what might have resulted from an investigation it never undertook at the time. *See Walter O. Boswell Mem’l Hosp. v. Heckler*, 749 F.2d 788, 803 (D.C. Cir. 1984)

<sup>13</sup> Ironically, after years in which the sole justification for using a complex model was that it was “*more* accurate and stable” than commenters’ simple proposal, HHS now says “the results were mixed”—an acknowledgment that HHS’s model was at best comparable, not more accurate. Furthermore, after 7 years, HHS finally “agree[d] that the use of historical data to adjust the CCRs is simpler and is consistent with CMS’ estimation of charge inflation.” 78 Fed. Reg. 50496, 50978 (Aug. 19, 2013).

to ‘enable us to see what major issues of policy were ventilated ... and why the agency reacted to them as it did.’” *Del. Dep’t of Natural Res. & Envtl. Control v. EPA*, 785 F.3d 1, 15 (D.C. Cir. 2015) (citations omitted). And, given that this comment went to the heart of HHS’s modeling, it demanded rational analysis, on the record. *Home Box Office, Inc.*, 567 F.2d at 35-36 (“[T]he opportunity to comment is meaningless unless the agency responds to significant points raised by the public.”).

2. HHS was indifferent to the underpayments its model produced

HHS acknowledged that its predictive model had overestimated payments for 2007, yet reapplied the same model to forecast payments for 2008; the model predictably overestimated 2008, yet HHS reapplied the same model to forecast 2009; and so on. Hospitals’ Br. 19-26.<sup>14</sup> Putting aside the specific modeling flaws that caused poor predictions, it was also irrational to persist with the model without examining its actual efficacy. *See* Hospitals’ Br. 19 (citing *Am. Petroleum Inst. v. EPA*, 706 F.3d 474, 477 (D.C. Cir. 2013) and *Appalachian Power Co. v. EPA*, 249 F.3d 1032, 1053 (D.C. Cir. 2011)).

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<sup>14</sup> The Hospitals recognize that a given year’s rulemaking may not be evaluated based on facts present only in a later year’s record. This brief, and the Hospitals’ opening brief, criticize each given rule based on its own record.

When commenters repeatedly noted discrepancies between HHS’s forecast and the actual results, the sole response HHS gave was to assert, “[w]e continue to believe that our calculation ... is more accurate and stable ....” HHS Br. 28 (quoting JA517). Thus, rather than drawing a rational connection between the facts and the decision, *see Motor Vehicle Mfrs. Ass’n v. State Farm Mut. Auto. Ins. Co.*, 463 U.S. 29, 43 (1983), HHS ignored the facts presented and repeated the assumptions. When experience does not bear out an agency’s assumptions, simply restating the assumptions is inadequate. *See Gas Appliance Mfrs. Ass’n v. DOE*, 998 F.2d 1041, 1045-46 (D.C. Cir. 1993) (“the accuracy of any computer model hinges on whether the underlying assumptions reflect reality”) (internal quotation marks omitted); *see also* Hospitals’ Br. 23 (citing *Appalachian Power Co.*, 249 F.3d at 1053).

Offering no rebuttal on this point, HHS instead now declares the comments were insufficiently “relevant” or “significant” to merit consideration. HHS Br. 29. That notion beggars belief, since the comments complained that HHS’s model had

overestimated payments, and thus underpaid, by hundreds of millions of dollars,<sup>15</sup> and offered a substantial and viable alternative.<sup>16</sup>

It bears emphasis that HHS's underpayments in 2007, 2008, 2010 and 2011 continued a trend since 2004. For 2004-2006, HHS refused to adjust charge ratios at all, a decision this Court held was irrational. *Banner Health* at \*59-60, 67, 69. When HHS introduced an adjustment factor in 2007 and 2008, it still continued to underpay significantly. Thus, contrary to HHS's assertion (HHS Br. 25), its belated decision to begin adjusting charge ratios in 2007 does not show that HHS properly confronted past underpayments by refining its modeling. Moreover, this historical context made it irrational for HHS not to question why, even after using its adjustment factor, it continued to underpay by hundreds of millions of dollars annually.

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<sup>15</sup> Comments each year summed the actual operating outlier payments, if any, recorded for each Medicare discharge in the MEDPAR data for two years earlier. *See* Hospitals' Br. 25 (citing JA461, JA501, JA549-50, JA607-08). These comments were in HHS's record during each rulemaking at issue. Further, contrary to HHS's assertion, the Hospitals cited sources for the table showing the magnitude of HHS's underpayments. Hospitals' Br. 25 & n.26.

<sup>16</sup> As noted, *supra* 11-12 and n.12, HHS's brief offers several ineffective and *post hoc* rationalizations (its model was too new to be second guessed; and underpayments could have been caused by "unrelated" reasons), but the rulemaking records lack any contemporaneous assessment by HHS of how poorly its model had performed.

As to 2010 and 2011, HHS points out that it noted how its model appeared to have underestimated payments for 2009, and thus HHS would not change its methodology and needed to increase the threshold. HHS Br. 28. This argument illustrates HHS's one-sided consideration of outcomes, a problem raised in the Hospitals' opening brief. HHS says it responded to overpayments and underpayments consistently, in that it always set the threshold based on the model. HHS Br. 25-27. HHS misses the point. HHS's threshold rules had to rely on a conclusion that its predictive model was reasonable. It was irrational for HHS to rely on one apparent overpayment to support that conclusion, HHS Br. 28, but not to regard the repeated, much larger underpayments (roughly 50%-100% larger) as reasons to doubt the model. *See* Hospitals' Br. 21-25.

Lastly, as commenters demonstrated using actual data, HHS's estimate of an overpayment was questionable. JA595.<sup>17</sup> HHS defended its choice to model past outlier payments by arguing that it had previously used the same approach to model the thresholds. JA628. However, testing a model's validity through reuse of the same model, when actual data reveals a contrary result, is not a

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<sup>17</sup> HHS now downplays the comments as "vague" because they supposedly did not reference an attached report that described the underlying calculations. HHS Br. 44. HHS is off base—each attached report was itself part of the comment record and HHS acknowledges they provided details. Regardless, the comments cited the detailed reports, repeatedly and particularly with respect to outlier payments. *See* JA491-95, JA536-41 (citing reports from Vaida Health Data Consultants).

reasonable approach.<sup>18</sup> See *Chem. Mfrs. Ass’n*, 28 F.3d at 1265 (holding it is “arbitrary and capricious if there is simply no rational relationship between the model and the known behavior”).

3. HHS’s model was structurally unsuitable for predicting changes in charge ratios

The Hospitals demonstrated several critical flaws in HHS’s method. Strikingly, HHS’s basic response merely recites the mathematical steps in the model and then claims that HHS is entitled to so much deference that its errors may not be challenged. HHS Br. 21-22. HHS does not explain why it judged those mathematical steps appropriate, given the model’s well-documented flaws—the key judgment on which deference would be predicated. “If [a] model is challenged, the agency must provide a full analytical defense.” *Eagle-Picher Indus., Inc. v. EPA*, 759 F.2d 905, 921 (D.C. Cir. 1985); see *Nat. Res. Def. Council, Inc. v. Herrington*, 768 F.2d 1355, 1422 (D.C. Cir. 1985) (finding agency’s modeling assumption inadequately explained because “the agency did not explain how the assumption ... corresponds to the real world” and the Court could

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<sup>18</sup> In the 2011 rulemaking, HHS claimed that “various payment exceptions” may explain the gulf between commenters’ calculations of past payments using actual data and HHS’s own modeled estimates. HHS Br. 45 (citing JA628). However, HHS provided no explanation of how these exceptions could have caused a difference of hundreds of millions of dollars. Given the weight HHS has placed on the apparent 2009 overpayment as a justification for maintaining its model, this assertion about “exceptions” was an inadequate explanation.

not “gauge with any confidence what effect that assumption had on the final rules”).

HHS asserts that it reasonably preferred its method “because it takes into account the costs per discharge and the market basket percentage increase....”

HHS Br. 28 (citing JA517); HHS Br. 15-16, 36. This argument is tautological.

HHS states the “market basket” reflects price inflation as a contribution to hospital costs, while the remainder of “costs per discharge” reflects nonprice factors like changes in the mix of goods and services involved in treatment. HHS Br. 35 n.5.

But the real historical trend necessarily took account of those measures too, in that actual cost increases were the product of the same nonprice factors and price inflation.<sup>19</sup> It is as though, being asked what the temperature is, HHS insisted on using a complex model that factored multiple variables (*e.g.*, the angle of incidence of the sun, the day of the year, geographic coordinates, and humidity), rather than simply looking at the outdoor thermometer.

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<sup>19</sup> *Banner Health*, filling in an explanation the 2007 rulemakings lacked, assumed the market basket would “correlate[] reasonably well” with hospitals’ cost inflation. *Banner Health* at \*77. Commenters in the 2008 and later rulemakings showed that it did not correlate, *see* Hospitals’ Br. 35-36 (citing comment); and HHS itself disavows the premise that *Banner Health* posited, HHS Br. 35 (“calculations were not based on the simple assumption that the market basket ... could be used as a ... proxy”).

Because HHS’s “takes into account” rationale would apply just as well to the suggested alternative of projecting historical trends forward, the rationale cannot justify HHS’s rejection of that alternative.<sup>20</sup> HHS’s rationale therefore also cannot justify the various errors in HHS’s model.

First, whereas the charge ratios (used either to pay claims or to project the threshold) were derived from contemporaneous cost and charge data, HHS’s model used non-contemporaneous data—data separated by about 6 months. HHS’s use of non-contemporaneous data was critical because costs and charges were growing at different rates (with charges increasing faster than costs). Thus, a temporally mismatched ratio of average cost inflation (from earlier years) to average charge inflation (from a later period) would not be representative of the average change in charge ratios for the coming year. Moreover, the rate of charge inflation was declining. Thus, in HHS’s model, using a lower rate of charge inflation would predictably and systematically produce a smaller adjustment factor—exactly what happened.<sup>21</sup>

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<sup>20</sup> HHS computed the national average charge ratio in each rulemaking. Hospitals’ Br. 28 & n.30.

<sup>21</sup> As the *Banner Health* panel noted, such an underestimate would systematically generate underpayments. *Banner Health* at \*58-59.



HHS’s modeling for 2008 is a prime example of this phenomenon. The proposed rule predicted charges ratios would decline. JA435. However, the final rule used a more recent—thus lower—charge inflation statistic, in combination with the same period of cost data as in the proposal, and consequently predicted that charge ratios would increase. JA476.

HHS now says this defect in its model was too insignificant an issue for it to address *sua sponte* and that it had concluded the benefits of using the most recent data outweighed the costs of using data from separate time periods. HHS Br. 36. HHS did not present these arguments in the district court, *see* DE 77, 79, and they are waived. *See Armstrong*, 1 F.3d at 1282 n.4.<sup>22</sup> Further, since commenters had specifically questioned the accuracy of HHS’s model, its mechanics were on the table for HHS to address. *Del. Dep’t of Nat. Res. & Envtl. Control*, 785 F.3d at 16 (remanding where agency “failed to respond to comments suggesting that [a portion of the rule] was based on faulty evidence”). Moreover, the record itself reflects no such recognition of the costs of using mismatched data, much less

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<sup>22</sup> HHS also expressly withdrew “any argument ... that arguments not raised in comments [are] waived,” JA211 n. 2, which is not an available defense in an as-applied challenge.

weighing those costs against any potential benefits or any weighing of HHS's method versus using the recent historical record trend.<sup>23</sup>

HHS's new cost/benefit argument is also inconsistent with its basic decision to use the model in the first place. Recall that commenters urged HHS simply to project forward the most recent data on charge ratio changes. Instead, HHS multiplied the recent market basket figure by an average of "nonprice factors" generated by dividing prior-year cost increases by prior-year market baskets, going back three years or more. Were HHS genuinely interested in the benefits of using recent data, it would have recognized this point as a weakness of its model: it did not. For example, in the 2008 rulemaking HHS relied on cost inflation data as old as 2003, while the record trend of decline in charge ratios that commenters urged it to use was current through March 2007. **JA476**. HHS's claimed preference for recent data is, in fact, inconsistent with its modeling choice. *Cf. Cty. of L.A.*, 192 F.3d at 1022-23 (holding HHS action arbitrary where it offered insufficient reasons for treating similar situations differently).

Second, the Hospitals also raised a more fundamental inconsistency: that HHS insisted on modeling charge ratios while it was comfortable projecting

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<sup>23</sup> In support, HHS cites only a page in the record that simply demonstrates that the model did in fact use data from two different time-periods but has no discussion of the adverse impact this had. *See* HHS Br. 36 (citing **JA476**).

charges based on historical trends. HHS simply repeats the mantra that its model was more accurate and stable. HHS Br. 36. That response, inadequate on its own, *see supra* 10-14, also does not explain why the same treatment would not have made sense for charges.

Third, HHS's model was flawed because, as commenters emphasized, HHS assumed a consistent relationship between the market basket cost statistic and average cost inflation when the opposite was true. HHS now notes that its rulemakings acknowledged that the two factors deviate. HHS Br. 35. But the rulemakings did not explain why HHS nonetheless chose to use data from different periods. Ignoring the acknowledged discrepancy was irrational. *See Dow AgroSciences LLC v. Nat'l Marine Fisheries Serv.*, 707 F.3d 462, 472 (4th Cir. 2013) ("If anything, an acknowledgement that the assumption is flawed would seem to necessitate more explanation of why the assumption was used."). Nor does HHS explain now. Instead, it merely repeats the statement from the rulemaking that two measures of cost inflation are better than one. HHS Br. 34. This observation does not justify taking the two measures from different time periods.<sup>24</sup>

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<sup>24</sup> HHS also used a dated 3-year average of cost inflation to project cost inflation, which it then matched with the most recent charge inflation data. HHS has never explained why it did not also use a three-year average figure for charge inflation,

Lastly, as noted, HHS modeled its “recent” cost inflation statistic by relying on a data trend that was 2-4 years old. This led to the error of modeling a cost inflation statistic that was counter to the record trend. Although the data before HHS in the 2008 rulemaking showed a three-year trend of steady decline in the rate of cost inflation (from 7.15%, to 6.17%, then to 5.64%), HHS’s model predicted that cost inflation would increase to 6.49%. Hospitals’ Br. 36 (citing JA476). HHS now responds, *post hoc*, that cost inflation can conceivably go up or down, searching the record for a lone example from three years later in 2011. HHS Br. 33. However, nothing in the 2008 record suggested that cost inflation was or would be increasing; to the contrary, the only evidence was a projected decline. *See* JA475-76 (stating “actual FY 2006 market basket increase” was 4.3%) and JA473 (“forecast[ing] ... market basket increase for FY 2008 [of] 3.3 percent.”).<sup>25</sup>

Thus, HHS has not (during the rulemakings or in its brief) provided a rational defense of its model.

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which would have resulted in much larger negative adjustment factors and payments closer to reaching the 5.1% target.

<sup>25</sup> HHS also now argues this flaw was so trivial that HHS need not address it *sua sponte*. But commenters challenged HHS’s method for projecting cost inflation. Further, HHS failed to present this argument below so it is waived. *See* JA201 & JA214-15. Indeed, after initially arguing waiver due to alleged lack of comment, HHS expressly withdrew that argument. *See supra* n.22.

4. HHS cannot square the OIG Report with its asserted rationalizations for ignoring the impact of reconciliation

This Court’s recent decision in *Banner Health* does not foreclose the Hospitals’ challenges. That decision applies to the 2004-2007 thresholds in accepting HHS’s explanation (as to why it did not account for reconciliation) as adequate for the years immediately following the 2003 amendment to the payment regulations. *See, e.g., Banner Health* at \*50. However, by the 2008-2011 rulemakings there was a surfeit of relevant data about the amount of payments subject to reconciliation. For these years, the data made it unreasonable for HHS to persist with its assumption that few hospitals would have their outlier payments reconciled.<sup>26</sup>

HHS argues the Hospitals misunderstand its modeling, and that its simulations were designed to project the amount of payments after reconciliation. HHS Br. 42. HHS bases this argument on its repeated statement that its “simulations assume that [cost-to-charge ratios] accurately measure hospital costs based on information available to [the agency] at the time [it] set[s] the ... threshold.” *Id.* (quoting JA477 (alterations in original)). But that statement cannot have meant that HHS was, as it now claims, projecting reconciled charge

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<sup>26</sup> An average of 63 cost reports annually were referred for reconciliation during the 2008-2011 rulemakings. OIG Report at 8.

ratios, because HHS repeatedly asserted that it was difficult, if not impossible, to identify individual hospitals that would likely be subject to reconciliation in the coming year. Thus, HHS was asserting its unreconciled charge ratios were the same as what would result from reconciliation. This is the assertion that the Hospitals challenge, namely that reconciliation would have no effect on total payments.

HHS argues the Hospitals still have not explained how it could have figured out, in the 2008-2011 rules, exactly which hospitals would undergo reconciliation. But as the Hospitals have stated, HHS did not need to predict which specific hospitals would be reconciled in any given year. HHS only had to estimate the aggregate volume of reconciled payments set forth in cost reports its contractors had referred for reconciliation. *See* Hospitals' Br. 41-42.<sup>27</sup> HHS has not responded to this point.

HHS also argues that the OIG Report is irrelevant because it postdates the rulemakings. HHS Br. 39; *see also* JA186-87. This argument would only

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<sup>27</sup> HHS incorrectly argues (HHS Br. 41) that the Hospitals failed below to challenge the agency's explanation that it was difficult to predict which hospitals would have outlier payments reconciled and its assumption that the simulation charge ratios were accurate. In fact, the Hospitals consistently argued that HHS's rationalizations for not accounting for reconciliation lacked any basis in the administrative record and were contrary to the fact that material volumes of cost reports were being referred for reconciliation. *See, e.g.*, DE78 at 32.

apply to the postdated introduction of facts not previously before the agency. *See Hospitals’ Br. 40 n.46.* Here, however, HHS knew in real time that \$664 million in outlier payments that had been referred for reconciliation were being used to calculate the thresholds; HHS has also conceded that a court may take judicial notice of the OIG Report. **JA187.**

Finally, HHS contends that the OIG Report confirmed HHS’s expectations that so “few reconciliations” would occur that their impact could be ignored. HHS Br. 40. However, while the 2008-2011 rulemakings were in process, HHS’s contractors referred for reconciliation 305 cost reports representing a significant volume of outlier payments.<sup>28</sup> HHS did not confront these facts during the rulemakings; it simply asserted reconciliation would be so trivial that it could be disregarded entirely. *Cf., e.g., AEP Tex. N. Co. v. Surface Transp. Bd.*, 609 F.3d 432, 443 (D.C. Cir. 2010) (agency acted arbitrarily in not considering evidence that contradicted its methodology); *Farmers Union Cent. Exch., Inc. v. FERC*, 734 F.2d 1486, 1515 (D.C. Cir. 1984) (similar).

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<sup>28</sup> HHS says it determined against reconciliation with respect to 13 of 305 cost reports. HHS Br. 40. But HHS “approved over 200 cost reports” for reconciliation, OIG Report at Appendix, which balance comprises a material 50 hospitals per year. *See Hospitals’ Br. 41.*

**B. HHS's 2003 Rulemaking Violated The APA's Notice And Comment Requirements Under 5 U.S.C. § 553**

HHS argues that the Hospitals lack standing to challenge HHS's mid-2003 rulemaking regarding the outlier threshold. *See* HHS Br. 46-50. But 2003 was a watershed year: HHS overhauled its payment mechanism after acknowledging serious weaknesses that exposed it to manipulation. HHS's response to that manipulation before 2003 had enormously shortchanged compliant hospitals, and the mid-2003 rule was an opportunity to improve its threshold-setting method correspondingly. Had HHS then adopted the method that it considered in the draft Interim Final Rule, it would very likely have used the same method in subsequent years, including the rulemakings for 2008-2011. Its contrary decision is at the root of the problems discussed above.

While HHS was not bound to use a particular threshold-setting method, HHS often uses the same method for multiple years and has frequently justified using a given assumption in a particular year because it has used the method previously. *See, e.g.*, JA475 (2008 rule relying on 2007 adjustment-factor method, and otherwise taking for granted method used in 2003). The 2008-2011 rules were based on the methodological choices made in 2003; that connection establishes the 2003 decision as a cause of the Hospitals' underpayments in 2008-2011. *Cf. Wildearth Guardians v. Jewell*, 738 F.3d 298, 317 (D.C. Cir. 2013) ("All



that is necessary ... is to show that the procedural step was connected to the substantive result.”). Were HHS, on a remand of the 2003 rule, to adopt an alternative method, it would likely reconsider its 2008-2011 thresholds as well. That possibility constitutes a viable path to redress the injury. *Cf. id.*

On the merits, *Banner Health* decided HHS was not obligated to provide notice of the contents of the draft Interim Final Rule. Either party may yet seek rehearing of that case; the Hospitals reassert their arguments to preserve the issue if it is reopened. The Hospitals note that HHS raises a new argument that it had no obligation to provide notice and comment on the threshold in the mid-2003 rule. HHS Br. 48. HHS waived this argument by not raising it in the district court.

### **III. CONCLUSION**

The Hospitals respectfully request that the Court grant the relief requested in their opening brief.

## **CERTIFICATE OF COMPLIANCE WITH TYPE-VOLUME LIMIT**

1. This brief complies with the type-volume limit of Fed. R. App. P. 32(a)(7)(B) because, excluding the parts of the brief exempted by Fed. R. App. 32(f), this brief contains 6,479 words.

2. This brief complies with the typeface requirements of Fed. R. App. P. 32(a)(5) and the type-style requirements of Fed. R. App. P. 32(a)(6) because this brief has been prepared in proportionally spaced typeface using Microsoft Word 2010 in 14-point Times New Roman.

Dated: October 20, 2017

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**CERTIFICATE OF SERVICE**

I HEREBY CERTIFY that, on this 20<sup>th</sup> day of October, 2017, I served the foregoing *Final Reply Brief for the Appellants* electronically via the Court's CM/ECF System upon the following counsel of record for Appellee:

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